Elementary Math

Academic content standard(s)

Performance Indicator 5.G.10- Identify and plot points in all four quadrants

Big Ideas

Coordinate systems can be used to precisely identify locations.

Two-dimensional shapes can be identified, classified and analyzed by their properties.

Learning Goals

Students will:

- Understand the structure of a coordinate grid
- Relate the procedure of plotting points to the structure of a coordinate grid

Success Criteria

I can:

- Talk and write about plotting points on a coordinate grid using accurate vocabulary
- Identify where each quadrant is on a coordinate grid
- Plot and label points on a coordinate grid
- Create a rule about coordinates for each quadrant

Misconceptions students are likely to have as they work on the unit learning goals

- Students may have a procedural graphing misconception (y, x)
- Plot points in spaces rather than intersections.
- Students may not yet be able to apply graphing with negative coordinates

Strategies to share learning goals and success criteria with student

- Learning goals and success criteria will be shared after the vocabulary lesson.
- Students will do self-assessment after walking the grid and plotting points.
- Self-assessment against success criteria occurs at the end of the 3-day lesson.



Considerations for Diverse Learners

Consider these additional misconceptions:
Student may have difficulty conceptualizing the coordinate grid.

Student may not yet be able to graph fractions.